IRONHORSE...Leading America's Army in the 21st Century!

Digitization...

... A Warfighter's Perspective

National Defense Industrial Association
Symposium

LTC Mike Bowers

Commander, 2nd Battalion 20th Field Artillery Regiment 4th Infantry Division (Mechanized)

20 June 2001



AGENDA

- Digitized Division
 - What Makes Us Different...
 - Digitization Provides...
- Division Capstone Exercise (DCX)
 - Fire Support Observations

Digitized Axioms

- * A Warfighter's View
- Challenges Ahead

IRONHORSE...Leading America's Army in the 21st Century!

What Makes us Different...

...Technology...

MCS



... Optimizing new systems to increase lethality









AFATDS



What Makes Us Different.....Dominant Maneuver

Other Heavy Divisions



- Limited night capability
- ⟨ Non-digital
- ⇔ Single thermal sight 2nd generation FLIR ⇒
 - FBCB2 Digital C2 ⇒ Cdr's Independent
 - Thermal Viewer ⇒
 - Under-armor aux power unit ⇒
- Limited night capability
- **← Non-digital**
- **⇔** No rangefinder

- Improved FLIR ⇒
- FBCB2 Digital C2 ⇒
- Laser Rangefinder ⇒

- ← Night capable Radar guided,
 ← Non-digital
 Fire and former missiles
 - fire-and-forget missiles ⇒
 Night and adverse weather capable ⇒
 - Fully digitized ⇒



- Stinger team dismounts to engage
- - Fires from integrated launcher ⇒
 - FAADC2 system ⇒
 - Slew-to-Cue capability ⇒

Digitized Division









What Makes Us Different.....Precision Engagement

Other Heavy Divisions



- ← ATACMS capable (165 km)
- ⇔ 32 km range (non-ATACMS)
- ⇔ 93 seconds to fire
- ⇔ 216 seconds to reload
 - ATACMS Block II capable (300 km) ⇒
 - 45 km range (ER) ⇒
 - 16 seconds to fire ⇒
 - 160 seconds to reload ⇒





- ⇔ 30 km range
- ← Firing crew of 6
- ← AFCS

- 30 km range ⇒
- Firing crew of 6 ⇒
 - EDS/FBCB2 ⇒





- ← M113 Chassis
- **⇔ GVLLD**
- **⇔ HTU**

- M113 Chassis ⇒
 - GVLLD ⇒
- FOS LCU/FBCB2 ⇒



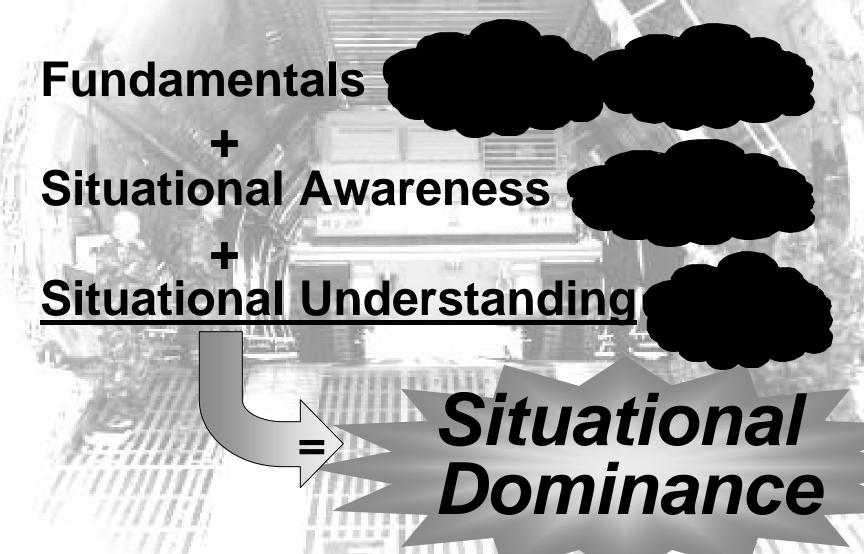


Digitization Provides...

- Situational Awareness:
 - Knowing where we are
 - Knowing where the enemy is
 - Knowing where we are at risk; where the enemy is vulnerable
- Situational Understanding:
 - Assessing what the enemy will do
 - Collaborating to synchronize
- Battlespace Dominance:
 - Defeating the enemy at a time and place of our choosing



The Synergy of.....



Division Capstone Exercise

"The Division Capstone Exercise clearly demonstrated what well-trained and competent leaders can do when they leverage information and use it as an element of combat power."

--- BG J.D. Thurman,
NTC Commanding General,
on DCX I

Pomasia

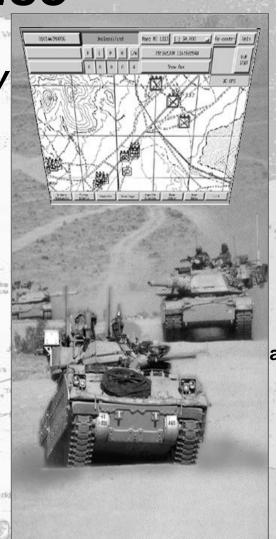
Division Capstone Exercise

- Demonstration of Warfighting Capability
 - Exercise not a test or a certification
- Phase I
 - NTC Rotation 01-06
 - 11 Mar-21 Apr 2001
- Phase II
 - BCTP WFX 02-01
 - Fort Hood Battle Simulation Center
 - Field CPs
 - 15-19 Oct 01

Armagosa

Sanesia

Firmesi



Kartuna

DCX I Fire Support Observations

- What We've Accomplished:
 - ✓ Streamlined Division-level Counterfire Fight
 - ✓ Power of the Fire Support Client
 - √ Improved Situational Awareness
- What We Need to Fix:
 - Dated Fire-Support Platforms
 - Target Location Error
 - Communications Architecture



Digitized Axioms

- Digitization Is for Everyone
 - Most Soldiers Use Digital Device(s)
- Training Fundamentals Remain Important
 - Gate Strategy; Individual, Crew, Collective
- Coup D'oeil Still Applies
 - Digital Devices Do Not Make Decisions
- Be Flexible
 - Hardware and Software Changes Often
- Back-Up Methods/Interoperability are Important



Digitized Axioms

- Leveraging Technology is Continuous
 - TTPs and SOPs must be adaptive
- Synthesize Combat Skills and Technology
 - Need Warriors; Not Geeks
- Leaders are a "Jack of All Trades, Master of None"
- Not a New Way of Warfighting A Better Way



Challenges As We Continue . . .



- TOE/MTOE
- Unit Training
- Institutional Training
- Continue to Refine Techniques, Tactics and Procedures
- Synthesize combat skills with technology